

# CLAIMS

1. Process for manufacturing a flexible sleeve intended to serve as interface between a prosthesis or an orthosis and a portion of a patient's limb, characterized in that it comprises the following successive steps:

- a sleeve preform (2) is chosen, which consists of a prefabricated hollow element made of a flexible thermoformable material, of approximately conical or cylindrical shape, having a closed end of rounded shape, the dimensions of which are matched to those of the stump intended to be fitted with the prosthesis or with the orthosis;

- this preform (2) is heated until it softens;

- this softened preform is slipped over the stump or over a replica (1) thereof;

- the shape of the softened preform (2) is matched to that of the stump or of its replica (1);

- the preform (2) thus shaped is left to cool on the stump or on its replica;

- the flexible cooled preform, which constitutes the desired sleeve (4), is removed from the stump or from its replica.

2. Process according to claim 1, characterized in that the flexible preform (2) is made of a polyolefin foam or ethylene-vinyl acetate foam by themselves or as a blend with other thermoformable materials.

3. Process according to either of claims 1 and 2,

characterized in that the softened flexible preform (2) is made to the shape of the stump or of the replica (1) thereof by exerting pressure outside this preform.

4. Process according to either of claims 1 and 2, characterized in that the softened flexible preform (2) is made to the shape of the stump or of the replica (1) thereof by exhibiting a vacuum inside this preform.

5. Flexible sleeve preform (2) which can be used in the process according to one of claims 1 to 4, characterized in that it consists of a prefabricated hollow element, made of a flexible thermoformable material, of approximately conical or cylindrical shape, having a closed end of rounded shape.

6. Preform according to claim 5, characterized in that it is made of a polyolefin foam or ethylene-vinyl acetate foam, by themselves or as a blend with other thermoformable materials.

7. Flexible sleeve for a prosthesis or orthosis, manufactured by a process according to one of claims 1 to 4.